* Know the difference between a **compound** and a **mixture**
* Know the differences and similarities between **compounds** and **molecules**.
* Know what a **subscript** does and what a **chemical formula** is.
* Know what ***electrons*** do for **ionic bonds**, **covalent bonds**, **polar covalent** **bonds** and **metallic bonds**.
* Know the different ways that **carbon bonds** and that carbon always has four covalent bonds.
* Know where (on the periodic table) most elements that form ionic compounds come from.
* Know how to write out the words for the chemical formulas that ionic bonds form and how the symbols go together. (Where does the positive ion go and where does the negative ion go?)
* Know how to read and write chemical formulas and that the second letter of the symbol for an element is lower case. For example Silicon is Si and Chlorine is Cl and Sodium is Na.
* Sodium Chloride is written: NaCl ***not*** NACL
* Know that covalent bonds are represented by a line between atoms.
* Know that the properties of the atoms of elements are very different from the properties of compounds made from those elements and that how the elements and bonds are arranged determines the properties of a compound.
* Two compounds made from the same elements can have properties that are different from each other.
* Know the ***properties*** of **ionic bonds, covalent bonds, polar covalent bonds** and **metallic bonds**.

REMEMBER – If you are asked to *compare and contrast* or to *explain*, the please write this out in **paragraph** form. If you are asked to *list*, then you may **list**, otherwise lists are only to **guide** you in writing a good paragraph that explains your thinking.